

Remarks

The withdrawal of the earlier rejections based on Biswas et al. (US 5,802,905), Visser et al (US 5,027,634), EP 696707, and/or Bessey et al. (US 4,825,677) is noted with appreciation.

The claims now stand rejected as being unpatentable over Andersson (US 4,444,556) and/or EP 696707. The Examiner's detailed remarks given in support of the rejection have been carefully considered and as understood, there appears to be a misunderstanding regarding the meaning of certain language in the claims.

As set forth in claim 17 as presented prior to the amendments made herein, the claimed device comprises, *inter alia*, a cooling device wherein the spray nozzles that surround the spraying area, are arranged in groups axially disposed along the horizontal axis of the spraying area, and a process control system for sequentially switching off the groups of spray nozzles while the block is held axially stationary relative to the spray nozzles. That is, the spray nozzle groups are axially spaced along the spraying area with the nozzles in each group at the respective axially spaced location collectively surrounding the spraying area, and it is the spray nozzle groups that are sequentially switched off. Claim 17 has been amended to avoid any misunderstanding as to what is being claimed in this regard.

Andersson does not disclose such an arrangement. In Andersson, the jets are installed on cooling tubes, which extend longitudinally and parallel to the axis of the cylinder to be cooled. Therefore, there are no nozzle groups spaced along the length of the cylinder that can be sequentially switched off. If flow to one of the cooling tubes of Andersson was shut off, all of the nozzles along the length of the cooling tube would be shut off, while the nozzles of the other cooling tubes would continue to spray cooling fluid along the length of the cooling apparatus. Looking at Fig. 1 of Andersson, the cooling nozzles in the plane of the figure appear to be located at the same axial location along the length of the cooling apparatus. To shut off flow to one of these nozzles would result in the shut off of flow to all of the other nozzles associated with the same cooling tube. To shut off flow to all of the nozzles shown in Fig. 1 would require the shut off of flow to all of the nozzles of the entire cooling apparatus. Thus, Andersson differs fundamentally from the cooling device recited in claim 17 and also in claim 36.

According to the Examiner, Andersson also allegedly discloses a cooling device containing jets operable individually or in groups at different pressures and operating

times, with reference being had to column 2, lines 40-44. The referenced text reads as follows:

There are no technical problems connected with mounting the various cooling fluid tubes which extend longitudinally and are arranged as a group or cluster so as to collectively encircle the hot tube being cooled. Normal bracketing, scaffolding, pipe hangers, etc., may be used for this purpose as shown in FIG. 1 where the brackets are shown at B fastened to the scaffolding S by releasable screw fastenings F.

Nowhere is there any mention of the tubes or nozzles associated therewith being "operable individually or in groups at different pressures and operating times", nor has any such teaching been found elsewhere in Andersson. Andersson only teaches at column 2, lines 46 - 50, the provision of different spray distribution patterns and intensities by rearranging the various cooling tubes. This method, however, has nothing to do with a cooling device as set forth in either claim 17 or claim 36.

The addition of EP 696707 does not overcome the above-discussed fundamental deficiencies of Andersson as a teaching reference vis-a-vis the claims.


For at least the foregoing reasons, the rejections lack proper basis and should be withdrawn.

New claim 41 is presented for favorable consideration by the Examiner.

Request is made for timely issuance of a notice of allowance. If the Examiner disagrees, he is requested to contact the undersigned to arrange an interview during which the issues can be discussed and hopefully resolved.

Respectfully submitted,

RENNER, OTTO, BOISSELLE & SKLAR, LLP

By 

Don W. Bulson, Reg. No. 28,192

1621 Euclid Avenue
Nineteenth Floor
Cleveland, Ohio 44115
(216) 621-1113